



217/782-6760

Refer to: L2010355004 -- Winnebago County  
Beloit Corp./Rockton  
Superfund/Compliance

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OFFICE OF RCRA  
WASTE MANAGEMENT DIVISION  
EPA, REGION V

SPECIAL NOTICE LETTER FOR RI/FS

DATE: June 22, 1990

EPA Region 5 Records Ctr.



255391

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

TO: POTENTIALLY RESPONSIBLE PARTIES DESIGNATED IN ATTACHED LIST

Dear Sir or Madam:

The Illinois Environmental Protection Agency ("IEPA") has documented the release or threatened release of hazardous substances at the above referenced Facility. Potentially Responsible Parties ("PRPs") who may be responsible for performing response actions when there is a release of threatened release of hazardous substances include the current and former owners or operators of the Facility, and persons who generated the hazardous substances or were involved in transport, treatment, or disposal of them at the Facility. See Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, ("CERCLA"), 42 U.S.C. Section 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986, Public Laws 99-499 ("SARA") and 22.2(f) of the Illinois Environmental Protection Act, Illinois Revised Statutes, 1989, ch. 111 1/2, par. 1022(f).

The IEPA has information that you may be a PRP. Therefore, pursuant to Section 122(e) of SARA and a cooperative agreement between IEPA and USEPA entered April 2, 1990, the IEPA is notifying you of your potential liability with respect to the above referenced Facility. The IEPA intends to take action appropriate to obtaining an RI/FS for this Facility. This may include action pursuant to Section 310 of CERCLA and/or Sections 4(q), 22.2(f) and 22.2(k) of the Illinois Environmental Protection Act, or requesting USEPA to use public funds.

The IEPA has determined that a period of negotiation will facilitate an agreement with you and other PRPs. Beginning four days from the date of this Special Notice Letter, you will have a maximum of 60 calendar days to coordinate with any other PRPs and to present to IEPA a "good faith" proposal, including a definite start date and time lines for implementing and conducting the following activities:

1. A Remedial Investigation ("RI") to identify the local hydrogeological characteristics, and to define the nature and extent of soil, air, ground and surface water contamination at the Facility, and
2. A Feasibility Study ("FS") to develop and evaluate possible remedial actions to remove or contain hazardous substances, pollutants, and contaminants at the Facility.

A RI/FS Statement of Work is enclosed.

A "good faith" proposal is a written proposal which demonstrates the PRPs' qualifications and willingness to conduct and finance the Remedial Investigation/Feasibility Study ("RI/FS"). A "good faith" proposal should include the following:

- A demonstration of the PRPs' technical capability to undertake the RI/FS. Include the name of the contractor you have selected to conduct the RI/FS and a summary of the contractor's qualifications;
- A demonstration of the PRPs' financial capability to finance the RI/FS;
- A statement of the PRPs' willingness to reimburse USEPA/IEPA for past costs and for the costs USEPA/IEPA incur in overseeing the PRP performance of the RI/FS; and
- The name, address, and telephone number of the party or steering committee who will represent the PRPs in negotiations.

The IEPA would like to encourage "good faith" negotiations among you, other PRPs and the IEPA. If several PRPs are interested in conducting the Remedial Investigation/Feasibility Study, it will be necessary to organize yourselves into a single representative body. To encourage this, the IEPA has enclosed a list of names and addresses of other PRPs who are also receiving this letter.

During a 60 calendar day period, beginning four days from the date of this Special Notice Letter, the IEPA will not commence the RI/FS at the Facility. If the PRPs provide the Agency with a written "good faith" proposal with a definite start date and time line for implementing the RI/FS at the Facility and if this proposal is received by the IEPA within the 60 calendar day period, the IEPA will extend the moratorium on commencement of the RI/FS work an additional 30 calendar days. The purpose of this additional time is to allow the PRPs and the IEPA adequate time to finalize a settlement. The settlement, if reached, will be incorporated into a federal consent decree. A proposed consent decree for filing in federal district court will follow this letter.

To further facilitate your ability to present a "good faith" proposal within the 60 day time limit, a conference will be held on July 18, 1990 at 1:30 p.m. at the Office of the Attorney General, Environmental Control Division, State of Illinois Center, 100 West Randolph, 12th Floor, Chicago, Illinois 60601.

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If you are already involved in discussions with Federal, State or local authorities, are engaged in voluntary action or are involved in a lawsuit involving this Facility, you may continue said activities. This letter is not intended to advise or direct you to restrict or discontinue any such activities; however, you are advised to report the status of those discussions or actions in your proposal to the Agency and also to provide a copy of your proposal to any other parties involved in those discussions or actions.

Following completion of the RI/FS and any other necessary studies, the USEPA and IEPA will determine the appropriate remedial action for the Facility. You may then be contacted again to undertake implementation of such remedy, possibly including design.

Your written response to this request is to be sent to:

Paul R. Jagiello  
Assistant Counsel  
Division of Legal Counsel  
Illinois Environmental Protection Agency  
1701 South First Avenue, Suite 600  
Maywood, Illinois 60153

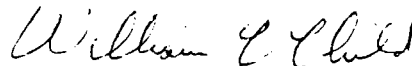
A copy of your written response should be sent to:

Paul Takacs, Remedial Project Manager  
Federal Sites Management Unit  
Remedial Sites Management Section  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276

If you need further information regarding this letter, you may contact Mr. Paul R. Jagiello, Assistant Counsel, at 708/345-9780 or Mr. Paul Takacs, Remedial Project Manager at 217/782-6760.

By copy of this letter, the Agency is notifying the National and State Resource Trustees and the USEPA of our intent to enter into negotiations with you for an RI/FS at this Facility.

Respectfully,



William C. Child, Manager  
Division of Land Pollution Control

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Attachment: List of PRPs  
Enclosure: Statement of Work

cc: Joseph Annunzio, Assistant Attorney General  
Mary Fulghum, Assistant Regional Counsel, U.S. EPA, Region 5  
Paul R. Jagiello, Assistant Counsel, DLC, IEPA  
Terry Ayers, Manager, Federal Sites Unit, DLPC, IEPA  
Paul Takacs, State Remedial Project Manager, DLPC, IEPA  
Melinda J. Gould, Chief, Illinois/Ind. Unit 1, USEPA  
Dennis Dalga, Federal Remedial Project Manager, USEPA  
Howard Chinn, Chief Engineer, Environmental Control Division, Attorney General's Office  
Director, Illinois Department of Conservation  
Director, Department of Energy and Natural Resources  
Division Manager, Division of Water Resources, Illinois Department of Transportation  
Beloit Corp./Rockton Administrative Record, c/o Paul Takacs, DLPC, IEPA  
Division File, DLPC, IEPA  
Region I File, DLPC, IEPA, Rockford

WLW:ww:6/21/90

Attachment  
PRP List - Beloit Corp. Site

1. Beloit Corporation  
1165 Prairie Hill Road  
Rockton, Illinois 61072
2. Safe-T-Way Manufacturing, Inc.  
918 Blackhawk Blvd.  
Rockton, Illinois 61072
3. Soterion/United Recovery, Inc.  
800 Watts Avenue  
Rockton, Illinois 61072

## STATEMENT OF WORK FOR CONDUCTING A REMEDIAL INVESTIGATION/ FEASIBILITY STUDY AT THE BELOIT CORPORATION, ROCKTON, IL SITE

This document is the Statement of Work (SOW) for conducting a Remedial Investigation (RI) and Feasibility Study (FS) at the Beloit Corporation, Rockton site located in Winnebago County, Illinois. The purpose of this SOW is to provide the direction and intent of the RI/FS. Within 60 days of the effective date of the Consent Decree a Draft RI/FS Work Plan will be submitted that provides detailed guidance for the execution of the RI/FS.

### PURPOSE

The purpose of the Remedial Investigation (RI) is to determine the nature and extent of contamination at the Beloit Corporation Site. The Feasibility Study (FS), based upon the RI report, will determine a viable remedial alternative. Beloit Corporation will furnish all personnel, materials, and services needed to perform the RI/FS at the site.

The Tasks described herein are grouped into the following three categories:

- Plans and Management,
- Remedial Investigation (RI), and
- Feasibility Study (FS).

### RI/FS WORK PLAN

#### Task 0 - RI/FS Work Plan Preparation

Prepare a Work Plan for the Remedial Investigation/Feasibility Study including the elements contained in this Statement of Work (SOW). The Work Plan shall include a detailed discussion of the technical approach, personnel requirements and schedules as well as the following:

##### 1. Field Sampling Plan

Prepare a Field Sampling Plan to address all field activities necessary to obtain additional site data. The plan will contain:

- an evaluation explaining what additional data are required to adequately characterize the site, evaluate the no action alternative, and support the feasibility study,

- a statement of sampling objectives,
- specification of equipment, analyses of interest, sample types, and sample locations and frequency,
- a sampling schedule compatible with IEPA target dates for the project.

The Plan should consider the use of field screening techniques to screen out samples that do not require off-site laboratory analysis.

The Plan must identify remedial technologies and associated data that may be needed to evaluate alternatives for the Feasibility Study.

## 2. Quality Assurance Project Plan

A Quality Assurance Project Plan (QAPP) for the sampling, analysis and data handling aspects of the Remedial Investigation shall be prepared and submitted for IEPA review/approval. The Plan shall be consistent with the requirements of all current USEPA and State guidance regarding the preparation of QAPPs.

The QAPP must address all types of investigations conducted at the site (e.g., waste characterization, hydrogeologic, soils and sediments, air, and surface water).

## 3. Health and Safety Plan

Prepare a Health and Safety Plan to address hazards that the investigation activities may present to the investigation team and to the surrounding community. The plan should address all applicable regulatory requirements and detail personnel responsibilities, protective equipment, procedures and protocols, decontamination, training and medical surveillance. The plan should identify problems or hazards that may be encountered and their solutions. Procedures for protecting third parties, such as visitors or the surrounding community, will also be provided. The plan will be consistent with, but not limited to:

- Section III(c) of CERCLA
- USEPA Order 1440.2 -- Health and Safety Requirements for Employees Engaged in Field Activities
- USEPA Order 1440.3 -- Respiratory Protection
- USEPA Occupational Health and Safety Manual
- USEPA Interim Standard Operating Safety Procedures
- 29 CFR Part 1910.120 OSHA Standards: Hazardous Waste Operations and Emergency Response
- Site Conditions

#### 4. Data Management Plan

Develop and initiate a Data Management Plan to document and track investigation data and results. This plan should identify and set up laboratory and data documentation materials and procedures, project file requirements, and project-related progress and financial reporting procedures and documents.

#### 5. ATSDR Health Assessment

The findings and conclusions of the Health Assessment, which had already been prepared by the Illinois Department of Public Health for ATSDR should be addressed in the RI report.

#### 6. Baseline Risk Assessment Plan

A Baseline Risk Assessment (BRA) plan will be developed to quantify the risks posed by the site and analyzing the public health impacts of the remedial alternatives. The methodology presented in this plan will conform all relevant Federal and State guidance.

### REMEDIAL INVESTIGATION

The objectives of the Remedial Investigation are to:

- Determine the characteristics and extent of contamination at the site,
- Define the pathways of contaminant migration,
- Define the physical features that could effect contaminant migration, containment or remediation,
- Quantify risk to public health and the environment,
- Gather all information necessary to support the Feasibility Study.

#### RI Scope

The RI consists of the following tasks:

- Task 1 - Description of Current Situation
- Task 2 - Site Investigation
- Task 3 - Site Investigation Analysis
- Task 4 - Laboratory and Bench-Scale Studies
- Task 5 - Community Relations Support
- Task 6 - Project Management/Reports



#### Task 1 - Description of Current Situation

Describe the background information pertinent to the site and outline the purpose for the RI at the site. The data gathered during the previous investigations or inspections, and other relevant data can be used, providing the data meets the requirements for use in the RI Report.

##### a. Site Background

A summary will be prepared describing the regional location, pertinent area boundary features, and general site physiography, hydrology and geology.

##### b. History of Response Action

A summary will be prepared of all previous response actions conducted by either local, State, Federal or private parties, including the site inspection and other technical reports, and their results. A list of reference documents and their locations will be included. The scope of the RI should be developed to address the problems and questions that have resulted from previous work at the site.

##### c. Nature and Extent of Problem

Prepare a summary of the actual and potential on-site and off-site health and environmental effects. This may include, but is not limited to, the types, physical states and amounts of hazardous substances, the existence and conditions of site-specific features (i.e. landfills and/or lagoons), effected media and pathways of exposure, contaminated releases such as leachate or runoff and any human and/or environmental exposure. Emphasis should be placed on describing the threat or potential threat to public health and the environment.

##### d. Define Boundary Conditions

Establish site boundary conditions to limit the areas of site investigations. The boundary conditions should be set so that subsequent investigations will cover the contaminated media in sufficient detail to support subsequent activities (e.g., the Feasibility Study). The boundaries may also be used to identify areas for site access control and site security.

##### e. Site Map

Prepare a site map showing all wetlands, floodplains, water features, drainage patterns, tanks, buildings, utilities, paved roads, easements, right-of-ways and other pertinent features.

The topographic survey will determine horizontal distances of appropriate physical features and elevations relative to the National Geodetic Vertical Datum of 1929. In addition to a topographic map, a grid plan will be prepared by using the photo plan and a grid overlay at a nominal scale of the plan. This grid plan shall show the locations of the monitoring wells, any other wells, sampling locations, and any other significant items and activities.

The legal descriptions of the properties will be reviewed and verified. The intent is not to perform a property boundary survey, but to confirm boundaries so that subsequent remedial investigations and/or remedial measures will not carry over on to neighboring properties without appropriate permission.

## Task 2 - Site Investigation

Conduct those investigations necessary to characterize the site and its actual or potential hazard to public health and the environment. The investigations should result in data of adequate technical content to support the development and evaluation of remedial alternatives during the Feasibility Study. Investigation activities will focus on problem definition and data to support the screening of remedial technologies, alternative development and screening, and detailed evaluation of alternatives.

The goals of the site investigation are to:

- Fully characterize the chemical nature of the wastes at the site,
- Define any identifiable contaminant sources at the site,
- Determine the vertical and horizontal extent of contamination originating at the site,
- Spatially quantify contamination to the extent necessary to enable preparation of a Baseline Risk Assessment and the Feasibility Study,
- Identify contaminant migration pathways and movement, and
- Quantify public health and environmental risk.

The site investigation activities will follow the plans set forth in the Work Plan. All sample analyses will be conducted at laboratories following IEPA and USEPA protocols or their equivalents. Strict chain-of-custody procedures will be followed and all samples will be located on the site map established under Task 1.

At a minimum, samples collected shall be analyzed for the Contract Laboratory Program (CLP) Hazardous Substance List (HSL).

Both IEPA and USEPA believe the following subtasks are consistent with satisfying the goals above. The Work Plan developed pursuant to this Statement of Work may propose alternative methods of achieving the goals of the Site Investigation.

a. Hydrogeologic Investigation

A hydrogeologic study will be performed to further evaluate the subsurface geology, water bearing formations, and the potential for groundwater contamination. The study should determine the location of water bearing formations, confining lenses, bedrock, and other subsurface geologic features. The study should also predict the long term disposition of contaminants if they migrate to the groundwater.

Efforts should begin with a survey of previous hydrogeologic studies and other existing data as performed by IEPA and Warzyn Engineering. The survey should address the degree of hazard, the mobility of pollutants, the soils' attenuation capacity and mechanisms, discharge/recharge areas, regional flow directions and quality, and effects of any pumping alternatives that are developed, if applicable. Such information may be available from the IEPA, USEPA, USGS, the Soil Conservation Service and/or local well drillers.

A technical description of all methods to be used in gathering data for this task will be included in the Work Plan. This should include a diagrammatic representation of proposed monitoring well locations, design and construction, information on materials, drilling techniques and well development methods.

b. Municipal and Residential Well Samples

Conduct a program to collect water samples from all local residents not serviced by municipal water supplies. The data will be used to determine groundwater quality in relation to wastes at the site and the necessity to initiate action if contamination is found.

c. Soils Investigation

Conduct a program to determine the location and extent of contamination of surface and subsurface soils both on and off the site. This investigation may overlap with certain aspects of the hydrogeologic investigation (e.g. characteristics of soil strata are relevant to both the transport of contaminants by groundwater and to the location of contamination in the soil, cores from groundwater monitoring wells may serve as soil samples).

The horizontal and vertical extent of contaminated soils should be determined. Information on local background levels, degree of hazard, location of samples, techniques utilized, and methods of analysis should be included. The investigation should identify the locations and probable quantities of subsurface wastes (i.e. drums) through the use of geophysical surveys and subsequent sample collection.

d. Surface Water and Sediment Investigation

Conduct a program to determine the extent of surface water and sediment contamination in any relevant areas around the site.

A survey of existing data on surface water flow quantity and quality and the casual relationship between the site and contamination, information on local background levels, locations and frequency of previous sampling events, sampling procedures, and methods and types of analyses will be particularly useful.

e. Technical Memoranda

At the completion of the site investigation, short reports (technical memoranda) should be prepared and submitted for each of the subtasks. These memoranda should be written in such a manner as to facilitate their incorporation into the final RI report.

**Task 3 - Site Investigation Analysis**

- a. Perform a quality assurance and data sufficiency evaluation. The objective of this subtask will be to ensure that the investigation data are sufficient in quality (e.g. QA/QC procedures have been followed) and quantity to support the Baseline Risk Assessment (BRA) and the Feasibility Study.

The QA/QC and data sufficiency evaluation will be submitted to IEPA as a technical memorandum. The QA/QC evaluation will determine whether the data met the requirements of the QAPP. The QA/QC evaluation will be performed in accordance with current State and Federal guidance. Once the data validation step is completed, the sufficiency review will evaluate whether the remaining data meet the objectives of the RI.

- b. Prepare an analysis and summary of all site investigations and their results. The results and data from all site investigations must be organized and presented logically so that the relationship between site investigations for each medium are apparent. Analyze all site investigation data and develop a summary of the type and extent of contamination at the site.

c. A second report, the Baseline Risk Assessment, will evaluate the actual or potential threat to public health, welfare, or the environment presented by the no-action alternative. Actual or potential risks will be quantified whenever possible. A general outline of work for the BRA is as follows:

- Select target chemicals for evaluation based on their degree of contribution to the risks associated with the site
- Conduct exposure assessments that include the identification of acute and chronic hazards of concern and the population(s) at risk.
- Evaluate existing toxicity information and determine the potential acute and chronic effects of the site contaminants as well as specific effects such as carcinogenicity, reproductive dysfunction, teratogenicity, neurotoxicity and other metabolic alterations; plus the effect on aquatic and terrestrial wildlife caused by environmental toxicity.
- Assess impact by identifying acceptable exposure guidelines or standards, comparing estimated doses with these guidelines or standards. For target chemicals at the site that are designated as carcinogens by EPA, the use of Agency evaluations should be utilized to estimate the increase in cancer risks.

The BRA will be conducted in accordance with the procedures described in USEPA's risk assessment guidance, Risk Assessment Guidance for Superfund: Volume I: Human Health Evaluation Manual and Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference.

#### Task 4 - Laboratory and Bench Scale Studies

Conduct laboratory and/or bench-scale studies to determine the applicability of remedial technologies to site conditions and problems, analyze the technologies, based on a literature review, vendor contracts and past experience to determine the testing requirements. This task should not be initiated until sufficient evidence of contamination exists to warrant a screening of alternatives for remediation purposes.

Develop a testing plan identifying the type(s) and goal(s) of the study(ies), the level of effort needed, and data management and interpretation guidelines for submission to the Agencies for review and approval.

Upon completion of the testing, evaluate the results to assess the technologies with respect to the site-specific questions identified in the test plan. Scale up those technologies selected based upon review and approval of test results by the IEPA Project Manager.

Prepare a report summarizing the testing program and its results, both positive and negative. This report, along with other technical memoranda, will be inserted into the RI Report after review and concurrence by the IEPA Project Manager.

NOTE: This task applies when additional studies are necessary to fully evaluate remedial alternatives. If determined necessary, modifications will be made to meet specific project conditions.

#### Task 5 - Community Relations Support

Community relations support shall be planned consistent with this Statement of Work.

#### Task 6 - Project Management/Reports

Responsibilities of project management throughout the RI/FS include:

- Working with IEPA to plan the scoping and scheduling for the RI/FS
- Maintaining the timely completion of scheduled activities and assuring the cost-effectiveness of each activity
- Keeping IEPA and USEPA informed of project schedules
- Maintaining project quality control and quality assurance
- Monitoring subcontractors
- Preparing monthly progress reports of technical and financial status
- Evaluation of documentation and graphics for compliance with IEPA and USEPA standards

Reports for the RI can be classified as follows:

##### a. Progress Reporting Requirements

Monthly reports shall be prepared by the Respondent(s) to describe the technical and financial progress of the project. These reports should discuss the following items:

1. Identification of site activities,
2. Status of work at site,
3. Percentage of completion and schedule status,

4. Difficulties encountered during the reporting period,
5. Actions being taken to rectify problems,
6. Activities planned for the next month,
7. Changes in personnel.

The monthly progress report will list target and actual completion dates for each element of activity, including project completion, and will provide an explanation of any deviation from the milestones in the Work Plan.

b. Technical Memoranda

The results of specific remedial investigation activities (such as the Migration Pathway Assessment, Source Characterization, Baseline Risk Assessment, etc.), will be submitted in draft form to the Agencies throughout the RI process. All responses to Agency comments concerning memorandum issues will be addressed in letters from the Respondent(s) Superfund Coordinator to the IEPA and USEPA Project Managers and will be summarized in the draft RI Report. The specific technical memoranda and their associated schedule of submittal will be identified on the RI/FS Work Plan (Task 0).

c. Remedial Investigation Report

A final report covering the Remedial Investigations (the RI Report) will be prepared. The RI Report will characterize the site and summarize the data collected and the conclusions drawn from the investigative Tasks 1 through 3. The Report will be submitted in draft form to the Agencies for review and comment. Upon receipt of comments, a draft final report will be prepared and submitted. The RI Report will not be considered final until a letter of approval is issued by the IEPA Project Manager.

## FEASIBILITY STUDY

### SCOPE

The purpose of the Beloit Corporation Feasibility Study (FS) is to develop and evaluate remedial alternatives based on the results of the Remedial Investigation that will mitigate impacts to public health and welfare of the environment. The Respondent(s) will furnish the necessary personnel, materials and services to prepare the remedial action FS except as otherwise specified.

The FS will conform to Section 121 of SARA, the NCP as amended, the FS guidance as amended, and all relevant State and Federal policies.

The FS consists of the following three Tasks:

- Task 7 - Remedial Alternatives Screening
- Task 8 - Remedial Alternatives Evaluation
- Task 9 - Feasibility Study Report

A Work Plan that includes a detailed technical approach and schedules will be submitted for the proposed FS.

## TASKS

### Task 7 - Remedial Alternatives Screening

This task constitutes the first stage of the FS and is comprised of six interrelated subtasks. The goal is to develop and evaluate remedial alternatives for additional screening and review. The Baseline Risk Assessment results will be considered throughout the evaluation process.

#### a. Subtask 7a - Preliminary Remedial Technologies

A master list of potentially feasible technologies will be developed that includes both on-site and off-site remedies. The master list will be screened according to site conditions, waste characteristics, and technical requirements, in order to eliminate or modify those technologies that may prove extremely difficult to implement, require unreasonable time periods, or rely on insufficiently developed technologies. The results of this task will be summarized in a Technical Memorandum that will be submitted to the Agencies.

#### b. Subtask 7b - Development of Alternatives

##### 1. Developing Remedial Response Objectives

Develop site-specific objectives based on public health and environmental concerns for the Beloit Corporation site, the description of the current situation, information gathered during the RI, section 300.68 of the NCP, USEPA's interim guidance and the requirements of any other applicable USEPA, Federal, IEPA or State standards, guidance and advisories as defined under sections 121 of SARA. Preliminary cleanup objectives will be developed under formal consultation with the Agencies.



## 2. Assembling Alternatives for Remedial Action

Develop a comprehensive, site-specific approach for a Remedial Action by assembling combinations of identified technologies that include the following:

- a. Treatment alternatives for source control that eliminate the need for long term management (including monitoring).
- b. Alternatives involving treatment as a principal element to reduce the toxicity, mobility or volume of waste.

Develop at least two additional alternatives that include the following:

- c. An alternative that involves containment of waste with little or no treatment but protects human health and the environment primarily, but not limited to preventing exposure to, or reducing the mobility of, the waste.
- d. A no action alternative.

For groundwater response actions, a limited number of remedial alternatives will be developed within a performance range defined in terms of a remediation level. The targeted remediation level is the risk range of  $10^{-4}$  to  $10^{-7}$  for maximum lifetime risk and includes different rates of restoration. If feasible, one alternative that would restore groundwater quality to a  $10^{-6}$  risk for maximum lifetime risk level within five years will be configured.

The remedial action alternatives developed for the Beloit Corporation Site may involve source control and groundwater response actions. In these instances, the two elements may be formulated together so that the comprehensive remedial action is effective and the elements complimentary. Because each element has different requirements, each will be detailed separately in the development and the analyses of alternatives.

### c. Subtask 7c - Initial Screening of Alternatives

#### 1. Initial Screening Considerations

The alternatives developed under Subtask 7b will be subjected to an initial screening to narrow the list of potential remedial actions for detailed analyses; the rationale for eliminating alternatives will be included. Initial screening considerations include:

a. Effectiveness - degree to which the alternative protects human health and the environment; attains State and Federal applicable or relevant and appropriate requirements (ARARs) or other applicable criteria, advisories, or guidance; significantly and permanently reduces toxicity, mobility or volume of hazardous constituents and are technically reliable and effective in other respects. Reliability considerations include the potential for failure and the need to replace the remedy.

b. Implementability - degree to which the alternative is technically feasible and employs available technologies; the technical and institutional ability to monitor, maintain and replace the technology over time, and the administrative feasibility of implementing the alternative.

c. Cost - evaluation of construction and long-term costs to operate and maintain the alternative based on conceptual costing information. At this stage of the FS, cost will be used as a factor when comparing alternatives that provide similar results, but not when comparing treatment and non-treatment alternatives. Cost will, however, be a factor in the final remedial selection process as described in Subtask 8b, Section 1, Paragraphs (c) and (d).

## 2. Intent of Alternatives Screening

The initial screening of alternatives incorporating treatment will be conducted with the intent of preserving the most promising alternatives as determined by their likely effectiveness and implementability. The screening should result in a range of alternatives remaining for future analyses as described previously in Subtask 7b(2).

Innovative alternative technologies will be carried through the screening if there is a reasonable belief they offer either the potential for better treatment performance or implementability, fewer or less adverse impacts than other available approaches or lower costs for similar performance than the demonstrated technologies.

The containment and no action alternatives will be carried through the screening process to the detailed analyses.

#### Subtask 7d - Remedial Alternatives Array Document

To obtain ARARs from the Agencies, a detailed description of alternatives (including the extent of remediation, containment levels to be addressed and method of treatment) will be prepared. This document will also include a brief site history and background, a site characterization that indicates the contaminants of concern, migration pathways, receptors and other pertinent site information. A copy of this Alternatives Array Document will be submitted to the Agencies along with a request for a notification of standards.

#### Subtask 7e - Community Relations Program

A program for community relations support will be developed. The program will be consistent with the Community Relations Program developed under Task 5 and with the conditions set forth in the Consent Decree.

#### Subtask 7f - Data Requirements

Data requirements specific to the relevant and applicable technologies will be identified. These requirements will focus on providing data needed for the detailed evaluation and development of a preferred alternative.

### Task 8 - Remedial Alternatives Evaluation

#### Subtask 8a - Detailed Analyses of Alternatives

##### 1. Evaluation of Alternatives

The action-specific State and Federal ARARs and other criteria, advisories and guidance to be used in the analyses and selection of a remedy will be identified and described. Alternatives will be analyzed in sufficient detail that remedies can be selected from a set of defined and discrete hazardous waste management approaches.

The information needed to compile and evaluate each alternative will be developed. The alternatives will be evaluated for long-term and short-term effectiveness, implementability and cost using the more specific component measures of protectiveness, compliance with State and Federal ARARs, reliability and technical feasibility.

##### 2. Comparison of Alternatives

Under this subtask, the alternatives will be compared using the full array of evaluation factors appropriate

for the Beloit Corporation site. Component measures of effectiveness will include the degree to which the alternative is protective to human health and the environment. Where ARAR health-based standards are established, they will be used to establish the minimum level of protection at the site. Where such levels do not exist, risk assessments will be used to establish appropriate site levels. The reliability of the remedy, including the potential need for the cost of replacement, will be used as another important element in measuring effectiveness.

Site-specific measures may also include other health risks borne by the effected population, population sensitivities and impact on environmental receptors. If a groundwater response is appropriate for the site, the potential for the spread of the contaminant plume and the technical limits of aquifer restoration will be used as measures of effectiveness. Another important measure of effectiveness is the degree to which the mobility, toxicity or volume of the hazardous substance, pollutant or contaminant is reduced.

Component measures of implementability that will be considered include the technical feasibility of the alternative, the administrative feasibility of implementing the alternative and the availability of any needed equipment, specialists or off-site capacity. Specific measures for groundwater remedial actions will include the feasibility of providing an alternate water supply to meet current groundwater needs, the potential need for groundwater and the effectiveness and reliability of institutional controls.

#### Subtask 8b - Preferred Remedy

The preferred remedy will be described within a chapter of the FS Report. The preferred remedy will meet the following criteria and findings:

1. The alternative will be protective of human health and the environment.
2. The alternative will attain all State and Federal ARARs (or health-based levels established through the risk assessments where ARARs do not exist or are waived) that have been identified for the site.
3. The alternative will be cost effective, providing a level of protection that cannot be achieved by less costly methods.

4. The alternative will utilize treatment technologies and permanent solutions to the maximum extent practicable as determined by technological feasibility, availability and cost effectiveness.

The preferred remedy will reflect the preferences for remedies that:

1. Involve treatment that significantly reduces the toxicity, mobility or volume of the hazardous constituents as a principal element.
2. Minimize the requirement for long-term management of residuals.

An alternative that is preferred, but does not meet the State or Federal public health or environmental ARARs, will be selected only when the following occurs:

1. The alternative is an interim remedy and will become part of a more comprehensive final remedy that will meet the State and Federal ARARs.
2. Compliance with the State and Federal ARARs will result in a greater risk to human health and the environment than the alternative options.
3. Compliance with the requirements is technically impractical.
4. The alternative will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement or limitation through the use of another method or approach.
5. The Agencies have not consistently applied or demonstrated the intent to consistently apply the requirement at other similar facilities across the State.

The evaluation of alternatives to select the appropriate remedy will, in addition to meeting the required findings in Section 300.68(h)(1) of the NCP and reflecting the preferences in Section 300.68(h)(2) of the NCP, also consider and weigh the full range of factors in section 300.68(e)(2) of the NCP. The selected alternative will represent the best balance across all evaluation criteria.

#### Task 9 - Final FS Report

The FS Report will be prepared in a draft report and submitted to the Agencies for review and comment. Upon receipt of comments, a

draft final FS Report will be prepared and submitted. The FS Report will not be considered final until a letter of approval is issued by the IEPA Project Manager. Deliverables and technical memoranda submitted previously will be summarized and referenced in order to limit the size of the report. The report will completely document the FS and the process by which the recommended remedial alternative was selected.

STATE OF ILLINOIS            )  
  ) SS  
COUNTY OF SANGAMON    )

## PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached SPECIAL NOTICE LETTER FOR RI/FS upon the persons included on the attached Service List, by placing a copy in an envelope addressed to each of them and sending it by certified mail, return receipt requested, from Springfield, Illinois on June 22, 1990, with sufficient postage affixed.

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SUBSCRIBED AND SWORN TO BEFORE ME

this \_\_\_\_ day of June, 1990.

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Notary Public

Service List

1. Beloit Corporation  
1165 Prairie Hill Road  
Rockton, Illinois 61072
2. Safe-T-Way Manufacturing, Inc.  
918 Blackhawk Blvd.  
Rockton, Illinois 61072
3. Soterion/United Recovery, Inc.  
800 Watts Avenue  
Rockton, Illinois 61072